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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,046	12/16/2003	Michael S. Hibbs	BUR920010135US2	4755
23550	7590	03/14/2005	EXAMINER	
HOFFMAN WARNICK & D'ALESSANDRO, LLC			NGUYEN, HUNG	
3 E-COMM SQUARE			ART UNIT	
ALBANY, NY 12207			PAPER NUMBER	
			2851	

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/737,046

Applicant(s)

HIBBS

Examiner

Hung Henry V. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 21-25, 27-32, 34 and 36-40 is/are rejected.
7) ☒ Claim(s) 26, 33 and 35 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 21, 24, 27, 29, 37, 39 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Wu et al (U.S.Pat. 6,710,845).

With respect to claims 21, 24, 37 and 39-40, Wu et al (figures 2- 3) discloses a mounting system and a corresponding method for a pellicle comprising all basic features of the instant claims such as: a mounting structure (230/wall 310) for coupling a pellicle (225) to a mask (235) wherein a sealed interior portion (240) is formed between the pellicle, the mask and the mounting structure (see figure 2 and col.6, lines 49-59) and a pressure regulator (320) in communication with the sealed interior portion to control a pressure in the interior portion wherein the pressure regulator (320) is coupled to a device (370) for measuring the pressure in the interior portion (see col.7, lines 38-40).

As to claim 27, Wu et al comprises a calibrated leak from the interior portion to an exterior portion (see col.6, lines 63 thru col.7, line 8).

As to claim 29, Wu et al further teaches the pressure regulator communicates with the sealed interior portion through a port (340/345) in the mounting structure.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al (U.S.Pat. 6,710,845) in view of Sato (U.S.Pat. 6,791,661).

As to claims 22, Wu et al discloses a mounting system comprising substantially all of the limitations of the claim as discussed including a pressured gas source (see figure 3) coupled to the pressure regulator for supplying inert gas onto the sealed interior portion. Wu et al does not expressly disclose a source of high pressure gas and a source of low pressure as claimed.

However, selecting suitable gas supplying systems for the claimed mounting system are well known in the art. For example, Sato (figure 6) discloses a mounting system for a pellicle and comprising: a mounting structure (PF) for coupling a pellicle (PE) to a mask (M) wherein a sealed interior portion (GS) is formed between the pellicle, the mask and the mounting structure. Sato further discloses a source of high pressure gas (94, 94a) coupled to the pressure regulator and a source of low pressure gas (93, 93a) coupled to the pressure regulator wherein one of the sources of pressure gas is the exterior environment. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the source of high pressure

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and the source of low pressure gas as taught by Sato into the system of Wu et al for the purpose of providing proper pressured gas to the enclosure and eliminating distortion of either the mask or pellicle due to improper pressure of the supplied gas.

As to claim 25, Wu et al lacks to show a position sensor for determining the position of the pellicle. Sato teaches a detector (85) for measuring the position of the pellicle. In view of such teaching it would have been obvious to a skilled artisan to combine the teachings of Wu et al and Sato to obtain the invention as specified in claim 25. It would have been obvious to one having ordinary skill in the art to utilize the position detector (85) as suggested by Sato into the system of Wu et al for detecting the position of the pellicle and controlling the pressure inside the sealed interior for correcting the distortion of the pellicle.

4. Claims 28, 30-31, 34, 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Wu et al (U.S.Pat. 6,710,845) in view of Sego (U.S.Pat. 6,055,040).

With respect to claims 28, 30-31, 34 and 36-38, Wu et al discloses a mounting system for a pellicle and comprising substantially all of the limitations of the claims as discussed except for "an aerodynamic fairing" as recited in the instant claims. Sego teaches a device for holding a pellicle. Sego further discloses a structure constituting of a portion of the membrane (230) attached to frame (240) at the top of the outer wall (251) with an adhesive (401) for the purpose of reducing turbulent air flow exerted on the pellicle (see figure 4, and col.7, lines 45-56). In view of such teachings, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Wu et al and Sego to obtain the invention as specified in the above mentioned claims. It would have been obvious to a skilled

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artisan to utilize the structure/“aerodynamic fairing” as taught by Sego into the mounting device of Wu et al for the purpose of reducing the deformation of the pellicle due to the effects of the air turbulence when the mask is moving whereby the operation life of the device is greatly prolonged.

Response to Amendment/Argument

5. Applicant's amendment filed January 21, 2005 has been entered. In dependent claims 21 and 37 have been amended. Applicants' arguments with respect to prior art have been carefully reviewed but they are not found persuasive and have been traversed as set forth above. The applicant is reminded that the claimed subject matter to examination will be given their broadest reasonable interpretation consistent with the specification, and limitations appearing in the specification are not be read into the claims. In re Yamamoto, 740 F. 2d 1569, 1571, 222 USPO 934, 936 (Fed.Cir. 1984).

With this in mind, the discussion herein will focus on how the terms and relationships thereof in the claims are met by the references. Response to any limitation that is not in the claims or any argument that is irrelevant to or does not relate to any specific claimed language will not be warranted.

In response to applicant's arguments that the membrane in Sego does not include “a taper to reduce aerodynamic drag on the pellicle and a portion that is co-planar with the pellicle” as recited in claim 30 since “in particular, the air flow discussed in that citation is apparently integral to the pellicle and mounting structure”; the Examiner respectfully disagrees with the applicant since firstly, the limitations on which the applicant relies (i.e., as underlined above) are

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not stated in the claims. It is the claims that define the claimed invention, and it is claims, not specification that are anticipated or unpatentable. (see *Constant v. Advance Micro-Devices Inc.* 7 USPQ2d 1064). Secondly, Sego meets the limitations as claimed since the structure of the pressure relief system, as described in figures 2 and 4 can be regarded as claimed “ aerodynamic fairing” in the broadest sense. It is the Examiner’s position that the outer wall (251) and inner wall (253) constitute the claimed taper and the top portion of the inner wall (253) is the claimed co-planar portion with the pellicle (230). The Applicant further argues that there is no motivation or suggestion to combine the references, except for the hindsight teachings of the current invention and the references are not concerned with “reducing the deformation of the pellicle due to the effect of the air turbulence *when the mask is moving*”. The applicant is reminded that the rejection here is made under 35 U.S.C. 103(a). Accordingly, there is no requirement that a motivation be expressly articulated (see *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). In response to applicant’s argument that the Examiner’s conclusion of combining is based upon improper hindsight reasoning, it must be recognized that nay judgment on combining/ or obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant’s disclosure, such a reconstruction is proper. *In re McLaughlin*, 43 F.2d 1392; 170 USPQ 209 (CCPA 1971). The issue here is whether or not one having ordinary skill in the art at the time the invention was made to combine the cited references to come up with the applicant’s invention. The person having ordinary skill in this art is usually a

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graduate engineer and the Examiner fails to find applicant's arguments convincing that the claimed invention would have been unobvious to such a person.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V. Nguyen whose telephone number is 571-272-2124. The examiner can normally be reached on Monday-Friday (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hvn
3/7/05



HENRY HUNG NGUYEN
PRIMARY EXAMINER